

MIAMI-DADE COUNTY, FLORIDA METRO-DADE FLAGLER BUILDING 140 WEST FLAGLER STREET, SUITE 1603 MIAMI, FLORIDA 33130-1563 (305) 375-2901 FAX (305) 372-6339

www.maimidade.gov/buildingcode

### **NOTICE OF ACCEPTANCE (NOA)**

**Vistawall Architectural Products** 803 Airport Road Terrell, TX 75160

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION:** Series FG-5000 Flush Glazed Aluminum Storefront System – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **FG-5000-LM**, titled "Product Approval Drawings - FG-5000 Storefront System - Protocols: PA 201/202/203" sheets 1 through 12 of 12, dated 1/16/09, prepared by the manufacturer, signed and sealed by Lewis A. Waldrop, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises and renews NOA # 04-0209.01 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

MIAMI-DADE COUNTY
APPROVED

NOA No. 08-1118.06 Expiration Date: January 08, 2014 Approval Date: March 11, 2009

Page 1

### Vistawall Architectural Products

### **NOTICE OF ACCEPTANCE:** EVIDENCE SUBMITTED

### A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. **FG-5000\_02**, titled "Product Approval Drawings FG-5000 Storefront System Protocols: PA 201/202/203", sheets 1 through 12 of 12, dated 1/16/09, prepared by the manufacturer, signed and sealed by Lewis A. Waldrop, P.E.

### B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, PA 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC PA 202-94
  - 3) Water Resistance Test, per FBC, PA 202-94
  - 4) Large Missile Impact Test per FBC, PA 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, PA 203-94

along with marked-up drawings and installation diagram of 8 specimens of FG-5000 window wall system, prepared by Hurricane Test Laboratory, Inc., Test Report No. HTL-0105-0612-02, dated 06/10/02 to 07/15/02, signed and sealed by Vinu J.

Abraham, P.E.

(Submitted under NOA#04-0209.01)

- 2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per PA 202-94
  - 2) Large Missile Impact Test, SFBC PA 201-94
  - 3) Cyclic Loading Test, per SFBC PA 203-94

along with installation diagram of a FG-5000 window wall system using 9/16" laminated glass with "Stormglass" laminate by Oldcastle Glass, prepared by Hurricane Test Laboratory, Test Report No.HTL-0105-0920-03, dated 9/17/03, signed and sealed by Vinu J. Abraham, P.E. (Submitted under NOA#04-0209.01)

### (Next test reports submitted under NOA#01-0516,12 and are for reference only)

- 3. Test reports on: 1) Large Missile Impact Test, SFBC PA 201-94
  - 2) Cyclic Loading Test, per SFBC PA 203-94
  - 3) Uniform Static Air Pressure Test, Loading per PA 202-94 along with installation diagram of a window wall system prepared by Hurricane Test Laboratory, Test Report No.**HTL-0105-0309-01**, dated 3/6/01, signed and sealed by Vinu J. Abraham, P.E.
- 4. Test reports on: 1) Large Missile Impact Test, SFBC PA 201-94
  - 2) Cyclic Loading Test, per SFBC PA 203-94

along with installation diagram of a window wall system prepared by Hurricane Test Laboratory, Test Report No.**HTL-0105-1212-00**, dated 12/18/00, signed and sealed by Vinu J. Abraham, P.E.

Manuel Perez, P.E. Product Control Examine NOA No. 08-1118.06

Expiration Date: January 08, 2014 Approval Date: March 11, 2009

### Vistawall Architectural Products

### **NOTICE OF ACCEPTANCE:** EVIDENCE SUBMITTED

- 5. Test reports on: 1) Air Infiltration Test, per PA 202-94
  - 2) Uniform Static Air Pressure Test, Loading per PA 202-94
  - 3) Water Resistance Test, per PA 202-94
  - 4) Forced Entry Test, per SFBC 3603.2(b) and PA 202-94.
  - 5) Large Missile Impact Test, SFBC PA 201-94
  - 6) Cyclic Loading Test, per SFBC PA 203-94

along with installation diagram of a window wall system prepared by Hurricane Test Laboratory, Test Report No.**HTL-0105-1212-00**, dated 12/21/00, signed and sealed by Vinu J. Abraham, P.E.

### C. CALCULATIONS

Anchor verification calculations and structural analysis, complying with FBC-2004 and 2007, prepared by Lewis A. Waldrop, P.E. Consulting Engineer, dated 11/07/08, signed and sealed by Lewis A. Waldrop, P.E.

Complies with ASTM E1300-02/04

### D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 07-1116.04 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Sentry Glass ® Plus" dated 01/03/08, expiring on 01/14/12.
- 2. Notice of Acceptance No. 07-1116.11 issued to Saf-Glas, LLC for their "SAF-GLAS Polycarbonate Laminate", dated 12/27/07, expiring on 12/16/12.
- 3. Notice of Acceptance No. **06-0216.06** issued to Solutia Inc. for their "Saflex IIIG Clear or colored interlayer" dated May 04, 2006, expiring on May 21, 2011.
- 4. Notice of Acceptance No. **04-0115.01** issued to Viracon, Inc. for their "Viracon HRG-2", dated 02/12/04, expiring on 02/12/09.
- 5. Notice of Acceptance No. 03-0514.15 issued to Oldcastle Glass Inc. for their "Storm Glass used for lamination of glass", dated 12/11/03, expiring on 12/11/08.

### F. STATEMENTS

1. Statement letter of conformance, dated 02/16/09, signed and sealed by Lewis A. Waldrop, P.E.

### G. OTHER

1. Notice of Acceptance No. **04-0209.01**, issued to Vistawall Architectural Products for their Series FG-5000 Flush Glazed Aluminum Window Wall System, approved on 03/04/04 and expiring on 01/08/09.

Manuel Perez, F.E. Product Control Examiner NOA No. 08-1118.06

Expiration Date: January 08, 2014 Approval Date: March 11, 2009

# FG-5000 STOREFRONT FRAMING SYSTEM

### **INDEX TO DRAWINGS**

SHEET 1: INDEX TO DRAWINGS AND NOTES

SHEET 2: TYPICAL ELEVATION

SHEET 3: HEAVY WALL & LIGHT WALL MULLION CAPIACITY CHARTS

SHEET 4: REINFORCED MULLION & REINFORCED JAMB CAPACITY CHARTS

SHEET 5: ANCHORED JAMB CAPACITY CHART

SHEET 6: GLAZING CAPACITY CHART

SHEET 7: HEAD & SILL ANCHOR LOAD CAPACITY CHART

SHEET 8 - 10: TYPICAL SYSTEM DETAILS

SHEET 11: SYSTEM DIE DRAWINGS

SHEET 12: BILL OF MATERIALS / ANCHOR SCHEDULE

## **GENERAL NOTES**

- 1) THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE 2007 EDITION FBC INCLUDING HIGH VELOCITY HURRICANE ZONE. (TAS 201, 202 203)
- 2) ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- 3) A 33% INCREASE IN ALLOWABLE STRESS NOT USED IN ANALYSIS.
- 4) ALL STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED OR PLATED PER FBC 2003.2.4

Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784 Lewis A. Waldrop, P.E. FLA. P.E. #21959

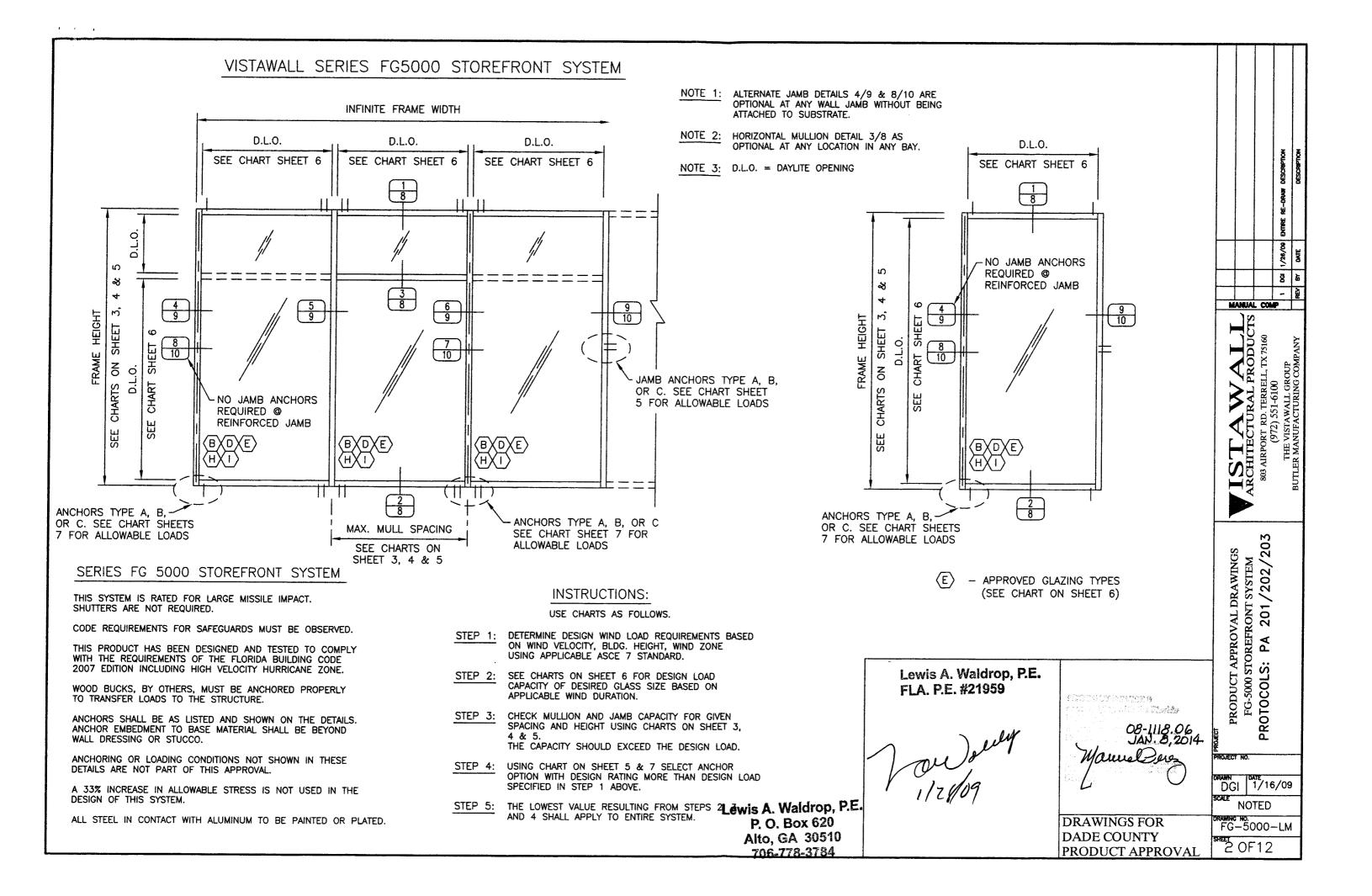
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FG-5000 STOREFRONT S
FG-5000 S
FG-

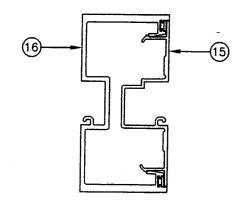
MANUAL COMP

DRAWN DATE 1/16/09
SCALE NOTED
DRAWNS NO. FG-5000-LM
SHEET 1 OF 12



CAF	MULLION LOAD CAPACITY — PSF FG-5155/FG-5109 MULL							
NOMINA	L DIMS.	MAX. Pd						
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)						
24"		+70.0/-70.0						
30"		+70.0/-70.0						
36"		+70.0/-70.0						
40"	89"	+70.0/-70.0						
44"		+70.0/-70.0						
48"		+70.0/-70.0						
52"		+70.0/-70.0						
60"		+70.0/-70.0						
24"		+70.0/-70.0						
30"		+70.0/-70.0						
36"		+70.0/-70.0						
40"	101"	+70.0/-70.0						
44"		+70.0/-70.0						
48"		+70.0/-70.0						
52"		+70.0/-70.0						
60"		+70.0/-70.0						
24"		+40.0/-50.0						
30"		+40.0/-50.0						
36"	116"	+40.0/-50.0						
40"		+40.0/-50.0						
44"		+40.0/-50.0						
48"		+40.0/-50.0						

# TYPICAL HEAVY WALL MULLION



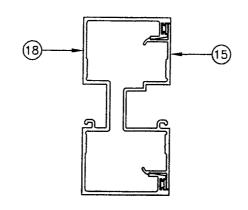
FG-5155/FG-510
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MULLION LOAD CAPACITY — PSF FG-5121/FG-5109 MULL							
NOMINAL DIMS. MAX. Pd							
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)					
24"		+70.0/-70.0					
30"		+70.0/-70.0					
36"		+70.0/-70.0					
40"	89"	+70.0/-70.0					
44"		+70.0/-70.0					
48"		+70.0/-70.0					
52"		+70.0/-70.0					

# TYPICAL LIGHT WALL MULLION

+70.0/-70.0

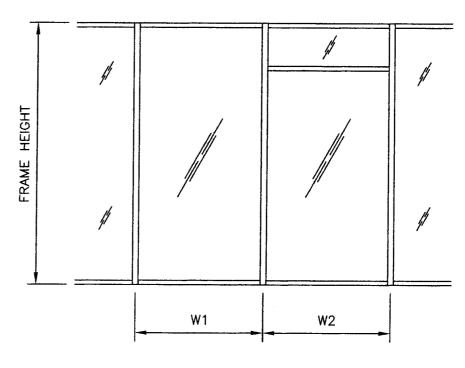
60"



FG-5121/FG-5109

Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784

# TYPICAL ELEVATION



WIDTH (W) =  $\frac{\text{W1} + \text{W2}}{2}$ 

Lewis A. Waldrop, P.E. FLA. P.E. #21959

Jane Jame

DRAWINGS FOR DADE COUNTY PRODUCT APPROVAL PRODUCT APPROVAL DRAWINGS
FG-5000 STOREFRONT SYSTEM
FG-5000 STOREFRONT SYSTEM
PROTOCOLS: PA 201/202/203

8 &

MANUAL COMP

DGI 1/16/09
SCALE NOTED
DRAWNG NO.

NOTED

PRAMERIE NO.
FG - 5000 - LM

SHEET

3 OF 12

# TYPICAL ELEVATION

	MULLION LOAD CAPACITY - PSF FG-5121/FG-5109 MULL W/ FG-5000-PP-8 REINF.									
	NOMINA	AL DIMS.	MAX. Pd							
	WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)							
	24"		+80.0/-80.0	Q						
	30"		+80.0/-80.0							
	36"		+80.0/-80.0							
	40"	89"	+80.0/-80.0							
	44"		+80.0/-80.0							
	48"		+80.0/-80.0							
	52"	1	+80.0/-80.0							
Ì	60"		+80.0/-80.0							
Ì	24"		+80.0/-80.0							
	30"		+80.0/-80.0							
1	36"		+80.0/-80.0							
	40"	101"	+80.0/-80.0							
l	44"	101	+80.0/-80.0							
l	48"		+80.0/-80.0							
	52"		+80.0/-80.0							
	60"		+80.0/-80.0							
	24"		+80.0/-80.0							
	30"		+80.0/-80.0							
	36"		+80.0/-80.0							
	40"	116"	+80.0/~80.0							
	44"	116"	+80.0/-80.0							
	48"		+80.0/-80.0							
	52"		+80.0/-80.0							
	60"		+80.0/-80.0							
	24"		+80.0/-80.0							

+80.0/-80.0

+80.0/-80.0

0.08-\0.08+

+80.0/-80.0

+80.0/-80.0 +80.0/-80.0

+80.0/-80.0

30"

36"

40"

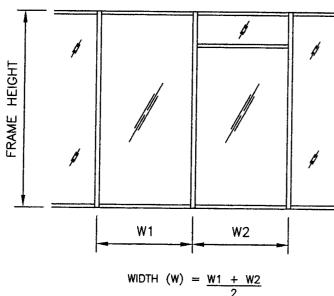
44"

48"

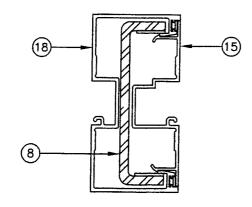
52"

60"

120"



TYPICAL LIGHT WALL MULLION WITH STEEL REINFORCING

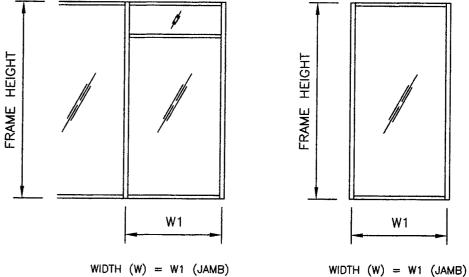


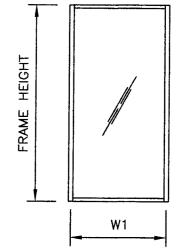
FG-5121/FG-5109 W/ FG-5000-PP-8 REINFORCING

# JAMB LOAD CAPACITY - PSF FG-5161/FG-5109 JAMB WITH FG-5000-PP-9 REINF.

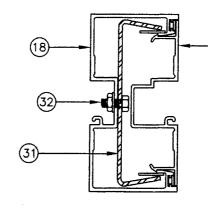
WITH FG-5000-PP-9 REINF								
NOMINA	L DIMS.	MAX. Pd						
WIDTH (W)	FRAME HEIGHT	1						
24"		+80.0/-80.0						
30"		+80.0/-80.0						
36"		+80.0/-80.0						
40"	89"	+80.0/-80.0						
44"		+80.0/-80.0						
48"		+80.0/-80.0						
52"		+80.0/-80.0						
60"		+80.0/-80.0						
24"		+80.0/-80.0						
30"		+80.0/-80.0						
36"		+80.0/-80.0						
40"	101"	+80.0/-80.0						
44"		+80.0/-80.0						
48"		+80.0/-80.0						
52"		+80.0/-80.0						
60"		+80.0/-80.0						
24"		+80.0/-80.0						
30"		+80.0/-80.0						
36"		+80.0/-80.0						
40"	116"	+80.0/-80.0						
44"	110	+80.0/-80.0						
48"		+80.0/-80.0						
52"		+80.0/-80.0						
60"		+80.0/-80.0						
24"		+80.0/-80.0						
30"		+80.0/-80.0						
36"		+80.0/-80.0						
40"	120"	+80.0/-80.0						
44"		+80.0/-80.0						
48"		+80.0/-80.0						
52"		+80.0/-80.0						
60"		+80.0/-80.0						

# TYPICAL ELEVATION





# TYPICAL JAMB WITH STEEL REINFORCING



Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784

FG-5121/FG-5109 JAMB WITH FG-5000-PP-9 STEEL REINFORCING NO ANCHORAGE TO STRUCTURE

Lewis A. Waldrop, P.E. FLA. P.E. #21959

1/29/09

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DRAWINGS FOR DADE COUNTY PRODUCT APPROVAL PRODUCT APPROVAL DRAWINGS FG-5000 STOREFRONT SYSTEM PROTOCOLS: PA 201/202/203

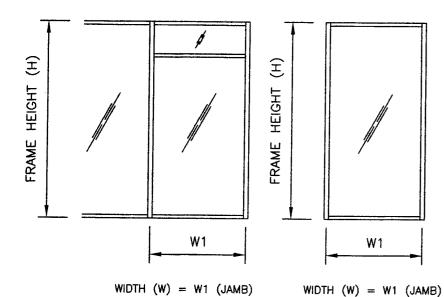
MANUAL COMP

ARCHITECTURAL PRODUCTS
803 AIRPORT RD. TERRELL, TX 75160

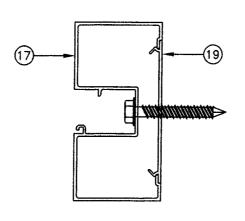
DGI 1/16/09 NOTED

FG-5000-LM \*4 OF12

### TYPICAL ELEVATION



# TYPICAL JAMB



FG-5161 ANCHORED TO SUBSTRATE THRU FG-5000-FP-12 ANCHOR PLATE

### ANCHOR TYPES: SEE SHEET 12 FOR DESCRIPTION

"A2" - (2) ANCHORS TYPE "A" LOCATED AS SHOWN BELOW

"B1" - (1) ANCHOR TYPE "B" LOCATED AS SHOWN BELOW

"B2" - (2) ANCHOR TYPE "B" LOCATED AS SHOWN BELOW

"C4" - (4) ANCHORS TYPE "C" LOCATED AS SHOWN BELOW

"C6" - (6) ANCHORS TYPE "C" LOCATED AS SHOWN BELOW

JAMB ANCHOR LOAD CAPACITY (PSF) FOR 1/4" MAX. SHIM								
		ANCHOR TYPE						
NOMINA	L DIMS.	"A2"	"B1"	"B2"	"C4"	"C6"		
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)						
48"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
51"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
54"	89"	+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
57"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
60"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
48"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
51"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
54"	101"	+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
57"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
60"		+80.0/-80.0	+70.0/-70.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0		
48"		+80.0/-80.0	+40.0/-50.0	+80.0/-80.0	_	+40.0/-50.0		
51"		+80.0/-80.0	-	+80.0/-80.0	-	_		
54"	116"	+80.0/-80.0	-	+80.0/-80.0	_	_		
57"	ĺ	+80.0/-80.0	_	+80.0/-80.0	-	-		
60"		+80.0/-80.0	_	+80.0/-80.0	-	-		
48"		+80.0/-80.0	-	+80.0/-80.0	-	-		
51"		+80.0/-80.0	-	+80.0/-80.0	-	-		
54"	120"	+80.0/-80.0	_	+80.0/-80.0	_	-		
57"		+80.0/-80.0	-	+80.0/-80.0	-	-		
60"		+80.0/-80.0	_	+80.0/-80.0	-	_		

1/2 1/2			H/2		N H 1 1/2"		3/4"	// 1/2"	Z/H 3/4"	//	1/2"
H/2		<i>#</i>	H/2	//	H/2	<i>A</i>	3/4" =		3/4" =		
	A	12		B1		B2		C4		C6	

Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784

Lewis A. Waldrop, P.E. FLA. P.E. #21959

Jan ) de les

Product revised complete with the Physics 08-1118.06 JAN 8.2014

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DRAWINGS FOR DADE COUNTY PRODUCT APPROVAL PRODUCT APPROVAL DRAWINGS
FG-5000 STOREFRONT SYSTEM
PROTOCOLS: PA 201/202/203

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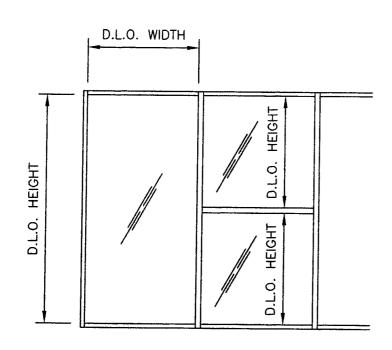
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FG-5000-LM

SHEET 5 OF 12

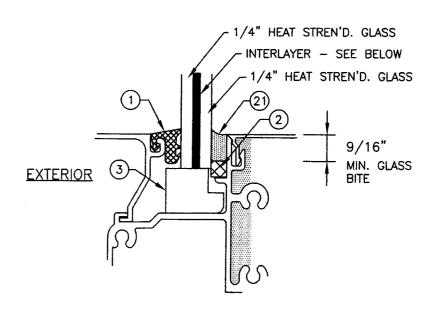
	GLAZING SCHEDULE							
GLASS MARK SYMBOL	GLASS TYPE	MANUFACTURER	MAXIMUM D.L.O. SIZE	MAXIMUM SQUARE FEET	MAXIMUM DESIGN PRESSURE (PSF)			
$\langle B \rangle$	5/8" OVERALL THICKNESS LAMINATED GLASS "HRG-2", CONSISTING OF TWO 1/4" HS GLASS AND A .080 POLYCARBONATE INTERLAYER BETWEEN TWO .050 URETHANE INTERLAYER	VIRACON	57 1/2" X 115"	45.9	+80.0/-80.0			
$\langle D \rangle$	9/16" OVERALL THICKNESS LAMINATED GLASS "SAF-GLAS" .070 POLYCARBONATE INTERLAYER BETWEEN TWO .015" ADHESIVE LAYERS BY SIGS	SECURITY IMPACT GLASS	57 1/2" X 96"	38.3	+70.0/-70.0			
(E)	9/16" OVERALL THICKNESS LAMINATED GLASS "SAFLEX" PLUS 100 CONSISTING OF TWO 1/4" HS GLASS, AND .090" SOLUTIA SAFLEX PVB INTERLAYER	SOLUTIA	45 1/2" X 111"	35.1	+40.0/-50.0			
$\langle H \rangle$	9/16" OVERALL THICKNESS LAMINATED GLASS "SENTRY GLAS PLUS 100", CONSISTING OF TWO 1/4" HS GLASS AND A .100" DUPONT SENTRYGLAS PLUS100 PVB INTERLAYER	DUPONT	57 1/2" X 96"	38.3	+70.0/-70.0			
	9/16" OVERALL THICKNESS LAMINATED GLASS STORMGLASS CONSISTING OF TWO 1/4" H.S GLASS AND A .075" OLDCASTLE INTERLAYER	OLDCASTLE	57 1/2" X 96"	38.3	+70.0/-70.0			



NOTE: GLASS CHECKED PER ASTM E1300-02 AND TESTING

Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784

# TYPICAL GLAZING DETAIL



### GLASS TYPES

- B .050" URETHANE
  .080" POLYCARBONATE
  .050" URETHANE
  AS MFG'D. BY VIRACON
- D .015" ADHESIVE .070" POLYCARBONATE .015" ADHESIVE AS MFG'D. BY S.I.G.
- (E) .090" SAFLEX PVB INTERLAYER BY SOLUTIA
- H .100" SENTRYGLAS PLUS INTERLAYER BY DUPONT
- .075" INTERLAYER BY OLD-CASTLE

Lewis A. Waldrop, P.E. FLA. P.E. #21959

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DRAWINGS FOR DADE COUNTY PRODUCT APPROVAL PRODUCT APPROVAL DRAWINGS
FG-5000 STOREFRONT SYSTEM
PROTOCOLS: PA 201/202/203

1/26/09

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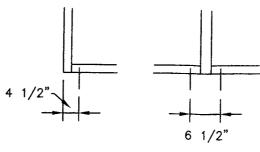
MANUAL COMP

DGI 1/16/09
SCALE NOTED

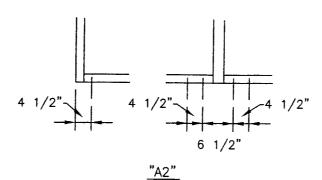
FG-5000-LM

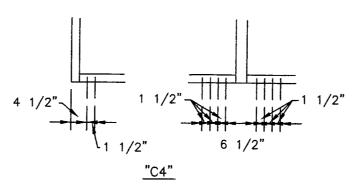
ANCHOR LOAD CAPACITY (PSF) FOR 1/4" MAX. SHIM SPACE							
MONIN	u Divic	ANCHOR TYPE					
	AL DIMS.	"A1"	"B1"	"A2"	"C4"	"C5"	
WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)					
24"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.	
<b>30</b> "		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.	
36"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.	
42"	89"	+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.	
48"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.	
54"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.	
60"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
24"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
30"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
36"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
42"	101"	+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
48"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
54"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
60"		+70.0/-70.0	+80.0/-80.0	+80.0/-80.0	+70.0/-70.0	+70.0/-70.0	
24"		+40.0/-50.0	+80.0/-80.0	+80.0/-80.0	-	+40.0/-50.0	
30"		+40.0/-50.0	+80.0/80.0	+80.0/-80.0		+40.0/-50.0	
36"		+40.0/-50.0	+80.0/-80.0	+80.0/-80.0	-	+40.0/-50.0	
42"	116"	+40.0/-50.0	+80.0/-80.0	+80.0/-80.0	_	+40.0/-50.0	
48"		+40.0/-50.0	+80.0/-80.0	+80.0/-80.0	-	+40.0/-50.0	
54"		+40.0/-50.0	+80.0/-80.0	+80.0/-80.0	_	_	
60"		+40.0/-50.0	+80.0/-80.0	+80.0/-80.0	_	-	
24"		_	+80.0/-80.0	+80.0/-80.0	-	_	
30"		_	+80.0/-80.0	+80.0/-80.0	-	-	
36"		_	+80.0/-80.0	+80.0/-80.0	-	_	
42"	120"	_	+80.0/-80.0	+80.0/-80.0		_	
48"	Γ	-	+80.0/~80.0	+80.0/-80.0	_	_	
54"			+80.0/-80.0	+80.0/-80.0	- 1	_	
60"	Γ	_	+80.0/-80.0	+80.0/-80.0		_	

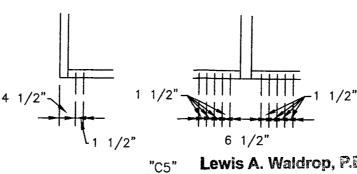
## TYPICAL ANCHOR CLUSTERS



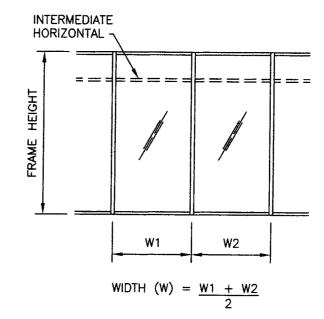
"A1", "B1"







Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784



### ANCHOR TYPES: SEE SHEET 12 FOR DESCRIPTION

"A1" - (1) ANCHOR TYPE "A" EA. SIDE OF MULLION OR JAMB

"B1" - (1) ANCHOR TYPE "B" EA. SIDE OF MULLION OR JAMB

"A2" - (2) ANCHORS TYPE "A" EA. SIDE OF MULLION & (1) ANCHOR TYPE "A" AT JAMB

"C4" - (4) ANCHORS TYPE "C" EA. SIDE OF MULLION & (2) ANCHOR TYPE "C" AT JAMB

"C5" - (5) ANCHORS TYPE "C" EA. SIDE OF MULLION & (2) ANCHOR TYPE "C" AT JAMB
ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION

Lewis A. Waldrop, P.E. FLA. P.E. #21959

MISTAWALL
ARCHITECTURAL PRODUCTS
803 AIRPORT RD. TERRELL, TX 75160
(972) 551-6100

1/26/09

**8** 8

THE VISTAWALL GROUP BUTLER MANUFACTURING COMPANY

MANUAL COMP

PRODUCT APPROVAL DRAWINGS
FG-5000 STOREFRONT SYSTEM
PROTOCOLS: PA 201/202/203

08-1118,06 JAN 8,2014 Mauuel Jese /

DRAWINGS FOR DADE COUNTY PRODUCT APPROVAL

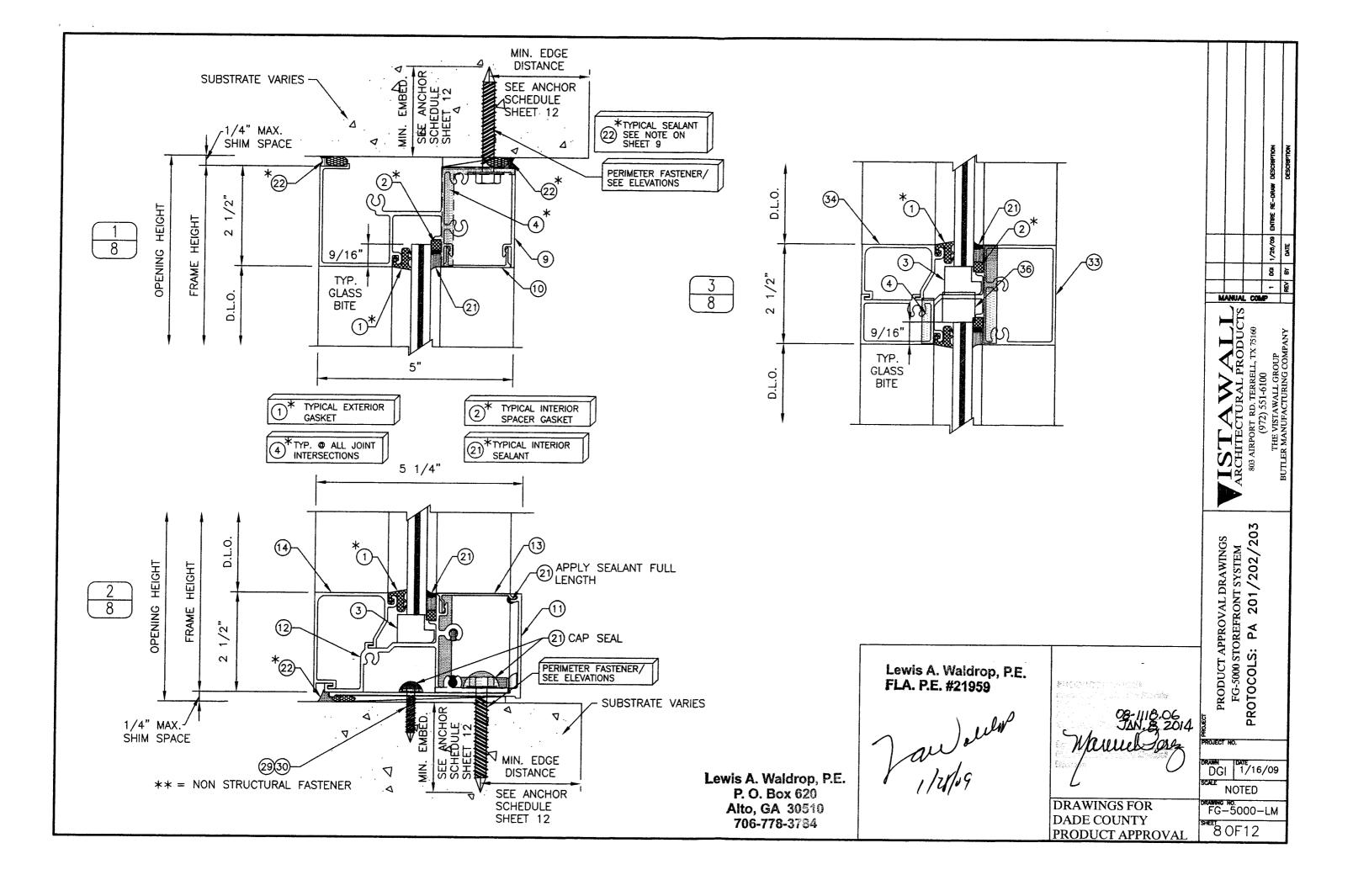
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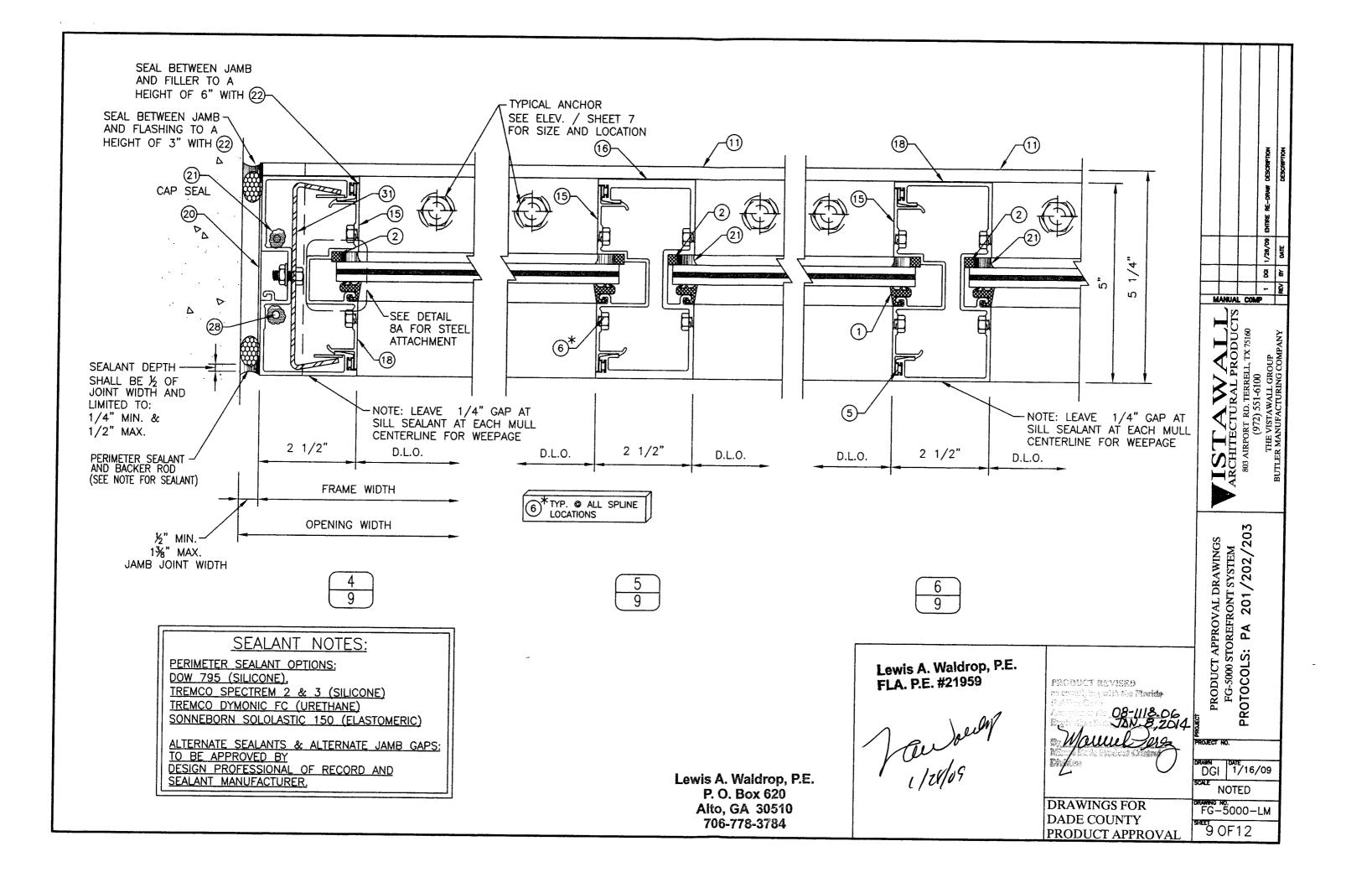
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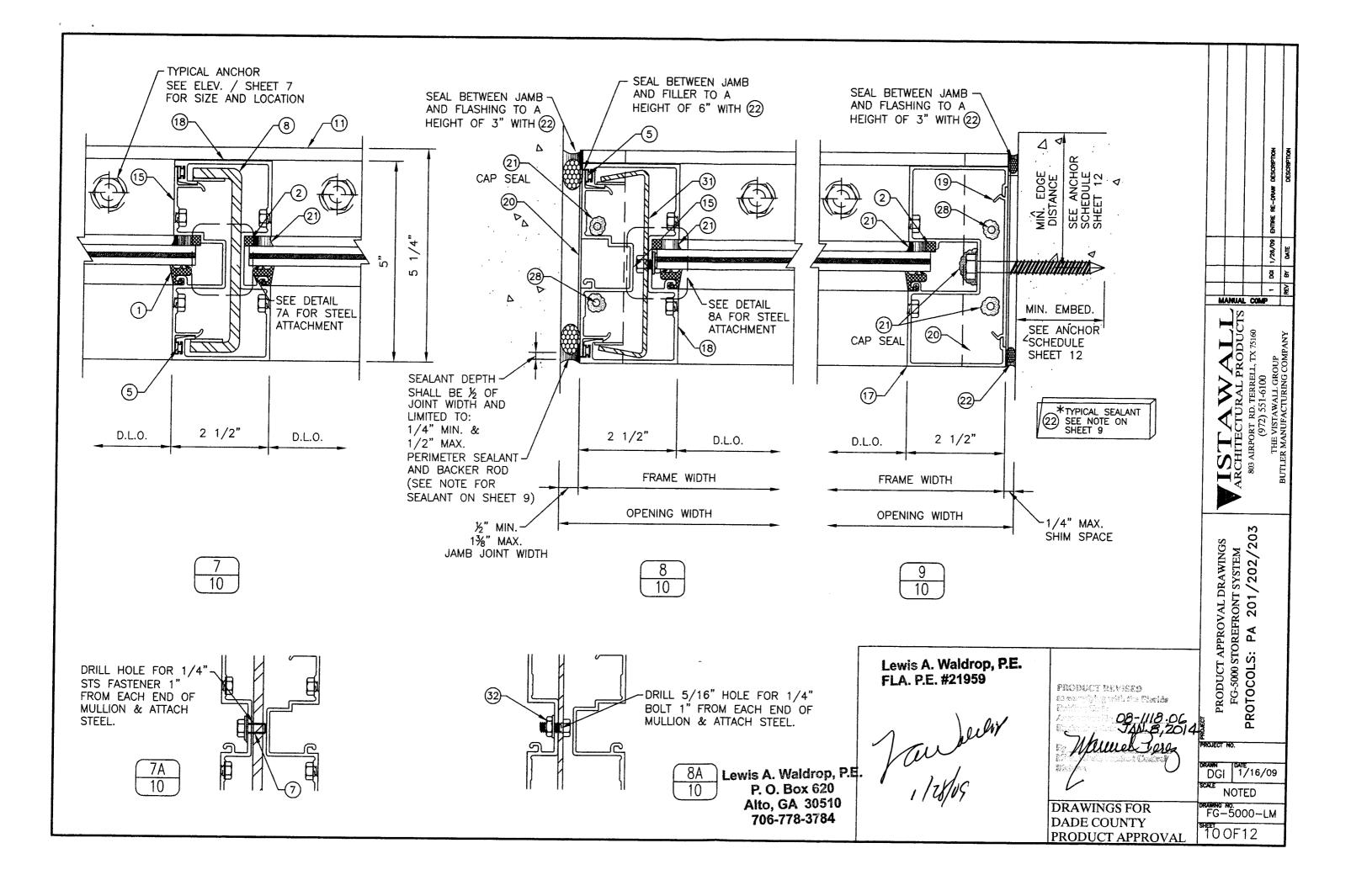
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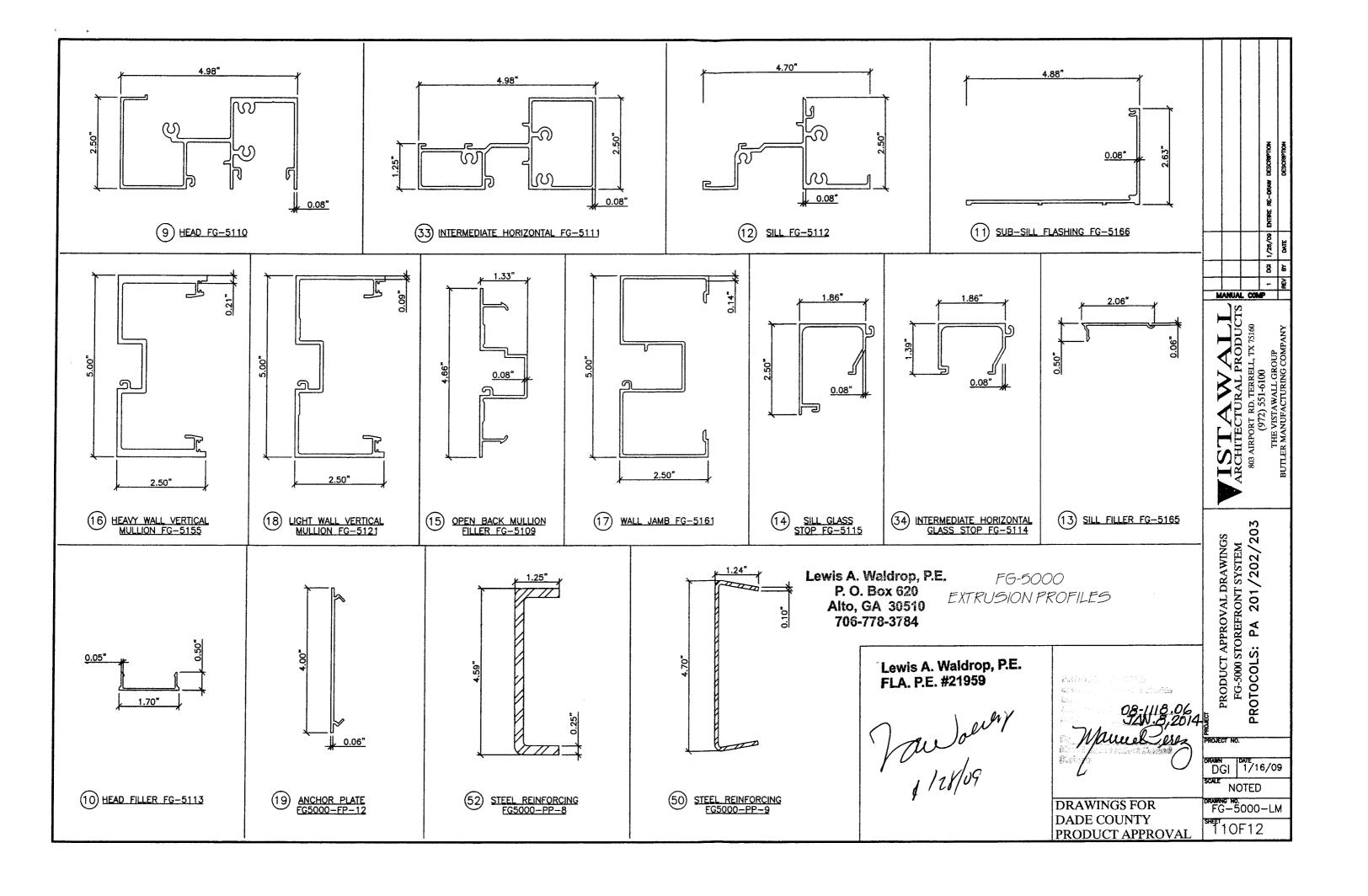
DRAWN DATE 1/16/09
SCALE NOTED

DRAWNO NO. FG-5000-LM
SHEET 7 OF 12









# **BILL OF MATERIALS**

ITEM No.		DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES			
1.	FG-1133	EXTERIOR GLAZING GASKET	.197 SPACE	EPDM	VARIES				
2.	V2110	INTERIOR SSA TAPE	.312 X .312	THERMAL BOND	NORTON				
3.	FG-5105	SETTING BLOCK SILL & HORIZONAL	4" LONG	EDPM	VISTAWALL				
4.	SM-5601	JOINT SEALANT TAPE	.125 X .50 VARIES	BUTYL	SCHNEE-MOREHEAD				
5.	CW 998	BULB GASKET FOR FILLER	VARIES	FOAM-TITE	AMESBURY				
6.	FS-8	SPLINE ASSEMBLY SCREW	#14 X 1 HHSTS	STEEL	VARIES				
7.	FS-38	ATTACH STEEL REINFORCEMENT	1/4-20 X 1/2" HH TYPE F	STEEL	VARIES				
8.	FG5000-PP-8	STEEL CHANNEL FOR FG-5121 (MULL)	1.25 X 4.562 X .250	A36 STEEL	VARIES	FULL LENGTH OF MULLION			
9.	FG-5110	HEAD	2.50 X 4.98 X .080	6063-T6 ALUMINUM	VISTAWALL				
10	. FG-5113	HEAD FILLER	.50 X 1.697 X .050	6063-T5 ALUMINUM	VISTAWALL				
11	. FG-5166	SUB SILL FLASHING	2.625 X 4.875 X .078	6063-T5 ALUMINUM	VISTAWALL				
12	. FG-5112	SILL	2.50 X 4.703 X .080	6063-T6 ALUMINUM	VISTAWALL				
13	. FG-5165	SILL FILLER	.500 X 2.055 X .062	6063-T6 ALUMINUM	VISTAWALL				
14	FG-5115	SILL GLAZING BEAD	2.500 X 1.863 X .078	6063-T6 ALUMINUM	VISTAWALL				
15	FG-5109	OPEN BACK MULLION FILLER	.780 X 4.66 X .08	6063-T6 ALUMINUM	VISTAWALL				
16	FG-5155	HEAVY WALL VERTICAL MULLION	2.50 X 5.00 X .213	6063-T6 ALUMINUM	VISTAWALL				
17.	FG-5161	WALL JAMB	2.50 X 5.00 X .075	6063-T6 ALUMINUM	VISTAWALL				
18.	FG-5121	LIGHT VERTICAL MULLION	2.50 X 5.00 X .094	6063-T6 ALUMINUM	VISTAWALL				
19.	FG5000-FP-12	ANCHOR PLATE	.375 X 4.00 X .070	6063-T6 ALUMINUM	VISTAWALL	18" LONG-CENTERED ON JAMB			
20	. FG5000-FP-10	SILL FLASHING END DAM	2.50 X 1.00 X .062	6063-T6 ALUMINUM	VISTAWALL	5.00" LONG			
21	DOW 995	STRUCTURAL SILICONE	FILL SPACE	SILICONE	DOW CORNING				
22	. VARIES	PERIMETER SEALANT	FILL SPACE	VARIES	VARIES	SEE NOTE ON SHEET 9			
23.		FOR ATTACHING HEAD TO STEEL SUBSTRATE	⅓" X 1 1/2" BOLT WITH NUT & WASHER	STEEL SAE J429 GRADE 5	VARIES	1 ½" MIN. SPACING			
24.	FASTENER	FOR ATTACHING JAMB TO STEEL SUBSTRATE	⅓" X 2" BOLT WITH NUT & WASHER	STEEL SAE J429 GRADE 5	VARIES	1 ½" MIN. SPACING			
25.	FASTENER	FOR ATTACHING SILL TO CONCRETE SUBSTRATE	¾" X 2 1/2" LONG LD TAPCON	STEEL	VARIES	2" MIN. EMBEDMENT 4 ½" MIN. SPACING			
26.		FOR ATTACHING HEAD/SILL TO WOOD SUBSTRATE	¾" X 2 1/2" LONG LÅG BOLTS	STEEL	VARIES	2" MIN. EMBEDMENT 1 ½" MIN. SPACING			
27.		FOR ATTACHING JAMB TO WOOD SUBSTRATE	¾" X 3" LONG LAG BOLTS	STEEL	VARIES	2" MIN. EMBEDMENT 1 ½" MIN. SPACING			
28.		BUTTONHEAD RIVET FOR ATTACHING FG5000-FP-10 TO FG-5166	場" DIA X %" — ½" GRIP	STEEL	VARIES	ATTACH AS SHOWN, USE #30 DRILL			
29.		FOR ATTACHING SUB SILL FLASHING TO CONCRETE SUBSTRATE	₹6" X 2" SHWH	STEEL	TAPCON	1" MIN. EMBEDMENT SPACE AS REQUIRED NON-STRUCTURAL			
30.	FASTENER	FOR ATTACHING SUBSILL FLASHING TO WOOD SUBSTRATE	¾6" X 2" LAG BOLT	STEEL	VARIES	1" MIN. EMBEDMENT SPACE AS REQUIRED NON-STRUCTURAL			
31.	FG5000-PP-9	STEEL CHANNEL FOR FG-5121 (JAMB)	1.25 X 4.688 X 12ga	A36 STEEL	VISTAWALL	FULL LENGTH OF MULLION			
32.	FS-39 FSN-37 FSW-65	ATTACHMENT OF STEEL REINFORCEMENT	1/4" X 1" HH BOLT W/ 1/4" NUT & (2) LOCKWASHERS	STEEL	VISTAWALL	ATTACH 1" FROM TOP AND 1" FROM BOTTOM			
33.	FG-5111	INTERMEDIATE HORIZONTAL	2.50 X 4.98 X .080	6063-T6 ALUMINUM	VISTAWALL				
34.	FG-5114	GLASS STOP FOR INTERM. HORZ.		6063-T6 ALUMINUM	VISTAWALL				
	FASTENER	FOR ATTACHING JAMB TO CONCRETE	3/8" X 3" LONG LARGE DIA, TAPCON	STEEL	VARIES	2" MIN. EMBEDMENT 4 1/2" MIN. SPACING			
36.	FG5000-FP-5 FG5000-FP-6	WATER DEFLECTORS	VARIES	RIGID VINYL	VISTAWALL	RIGHT HAND & LEFT HAND WATER DEFLECTORS © EACH END OF ITEM #33			

Lewis A. Waldrop, P.E. P. O. Box 620 Alto, GA 30510 706-778-3784 WOOD BUCKS NOT BY VISTAWALL
MUST SUPPORT LOADS IMPOSED BY
GLAZING SYSTEM AND TRANSFER THEM
TO THE BUILDING STRUCTURE.

### TYPICAL ANCHORS:

SEE ELEVATIONS FOR SPACING

### TYPE "A"- 3/8" LARGE DIAMETER TAPCONS

THRU 1BY WOOD OR 2BY WOOD BUCKS INTO 2500 PSI MIN. CONC. OR C-90 GROUT FILLED BLOCK. 2" MIN, EMBED. INTO CONC. OR MASONRY

DIRECTLY INTO 2500 PSI MIN. CONCRETE 2" MIN. EMBED. INTO CONC.

3 1/2" MIN. EDGE DISTANCE 4 1/2" MIN. SPACING

### TYPE "B"- 3/8" HHMB GR. 5 WITH HEX NUT AND WASHER

INTO METAL STRUCTURES (STEEL OR ALUM. 1/8" MIN. THICK.)

STEEL: Fy — 36 KSI MIN. ALUMINUM: 6063—T5 MIN. (STEEL IN CONTACT WITH ALUM. TO BE PLATED OR PAINTED)

1 1/2" MIN. EDGE DISTANCE 1 1/2" MIN. SPACING

### TYPE "C"- 3/8" LAG BOLT

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 2" MIN. PENETRATION INTO #2 SYP BUCK

1 1/2" MIN. EDGE DISTANCE 1 1/2" MIN. SPACING

Lewis A. Waldrop, P.E. FLA. P.E. #21959

Jan ) ouly 1/11/09 PRODUCT REVISED

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08-1118.06 JAN 8,2014 Maurel Jose

DRAWINGS FOR DADE COUNTY PRODUCT APPROVAL 1160
11 DGI 1/28/09 BUTRE RE-DRAW DESCRIPTION
NY REV BY DATE OCSCRIPTION

ARCHITECTURAL PRODUCTS
803 AIRPORT RD. TERRELL, TX 75160
(972) 551-6100
THE VISTAWALL GROUP

PRODUCT APPROVAL DRAWINGS FG-5000 STOREFRONT SYSTEM PROTOCOLS: PA 201/202/203

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DGI 1/16/09
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FG-5000-LM 120F12